

## ABSTRACT OF THE DISCLOSURE

A system and method for determining and balancing state of charge among plural series connected electrical energy storage units is provided. State of charge of a selected storage unit in a string of storage units is determined by (i) applying a non-

5 dissipative load to the selected storage unit, resulting in an energy transfer between the selected storage unit and the string of electrical energy storage units through the non-dissipative load and (ii) determining the state of charge of the selected unit from voltage and current data of the selected storage unit resulting from the energy transfer. When the state of charge of the selected unit is different than a target state of charge,

10 energy can be transferred energy between the selected unit and the string of storage units, such that the state of charge of the selected unit converges toward the target state of charge.